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(54) Title: ACTIVATORS OF HEXOSAMINE BIOSYNTHESIS AS INHIBITORS OF INJURY INDUCED BY ISCHEMIA OR HEMORRHAGIC SHOCK

(57) Abstract: Described herein are compositions and methods for preserving cell, tissue, or organ transplants and cultures by increasing the concentration of an intracellular metabolite of the hexosamine biosynthetic pathway. Also described herein are methods of reducing pathogenic effects in a subject by increasing the concentration of an intracellular metabolite of the hexosamine biosynthetic pathway.